

MEP ENVIRONews

NIST MEP Continues To Inform

Nationwide Toolmaking Effort Underway

From the rocky shores of Massachusetts to the sun-kissed beaches of California, toolmakers are busy readying NIST MEP funded environmental projects. With guidance from Brian Sweeney and Doug Reimel of the National Programs Area of NIST MEP, these projects will soon be ready to use. This issue showcases the nine programs currently in the works and lets you know how to get more information. Attached you will find a tools' status matrix that summarizes all of the information in a quick-reference format.

From online services to hard copy manuals, these tools will be available to help all of us better help our client companies.

CONTENTS

<i>Nationwide Toolmaking Effort Underway</i>	1
<i>Process Improvement And Pollution Prevention</i>	3
<i>Environmental Liability Concerns</i>	3
<i>P2T2 Training Update</i>	4
<i>See You In Seattle?</i>	4

THE TOOLS:

ISO 14000 Environmental Standard Interpretation & Assessment Tool

Contact: Stan Carson (ph.: 419-534-3705) of the Lake Erie MEP in Toledo, OH. Per Stan, "The tool will enable MEPs to measure the conformance gap between a company's existing level of compliance and the new standard (ISO 14000). MEPs will benefit through the use of a uniform assessment tool which should help facilitate conformance to the standard. The tool will also guide MEP staff on the implementation of ISO 14000." In the form of a hard copy manual, this project should be ready for release by the Spring of '97. There is no cost to MEP centers for this product which, in the words of Stan Carson, "will help manufacturers by keeping them in tune with the international marketplace, and by providing them with a cost-effective, high quality resource for ISO 14000 conformity assessment and ISO 14000 implementation."

Eco-Diagnosis: Environmental Benchmarking Software Tool for Smaller Manufacturers

Contact: Roc Tschirhart (ph.: 404-894-8045) of the Georgia Tech Research Institute in Atlanta. This software tool will help identify compliance issues such as which regulations apply and compliance status for smaller manufacturers, offer assistance for developing environmental management processes and benchmark the progress. Smaller manufacturers often feel a need to be in compliance

with regulations and have a desire to reduce or eliminate material under regulations. Roc hopes to help those same companies also add an internal system that enables them to improve their environmental performance on an on-going basis. A prototype is in the works for early Fall '96 release and a Beta tool should be ready by next Spring. The cost has yet to be determined.

Pollution Prevention Information Resource for Industry Sectors (P2IRIS)

Contact: Greg Hume (ph.: 513-948-2017) of the Institute of Advanced Manufacturing Sciences (IAMS). P2IRIS' temporary address is <http://www.iam.org/p2irisde/p2iris.htm>. This online service will provide information on cost-effective technologies and business practices for pollution prevention. Menu choices will include: flow charts for industry processes; chemistry information for process baths; non-quantitative material balances; process technologies information; equipment suppliers (including "hot links") and case studies. You may access P2IRIS in its current form at the temporary address (see above). Greg plans to have the final version of P2IRIS ready to go by December of this year and will eventually provide information for three sectors. The tool is free to MEP centers thru September of '98. A subscription fee of \$300 will be charged to other interested entities.

Pollution Prevention Assistance and Information Database (P2AID)

Contact: Gary Miller (ph.: 217-333-8942) of the Hazardous Waste Research & Information Center (HWRIC) in Champaign, IL. With an initial emphasis on the printing industry, this online service will provide a ready reference for field agents on environmental issues for specific industries in an interactive format. There will be suggested questions for the agent to ask as well as suggestions for dealing with the answers. Menu items will include: summaries of regulations; index of regulations; links to contacts for additional information; waste reduction options; a terminology definition section; technology descriptions; a searchable bibliography; equipment sources and vendor records; case studies and a directory of experts. There may also be a reference manual in the future. Gary plans to develop for five to seven additional industries in year two of the project. There is no charge, for now, and the Beta version is to be up in August. Gary plans to have the tool market ready by October.

Total Cost Assessment (TCA)

Contact: Karen Shapiro (617-266-5400) of the Tellus Institute in Boston. Karen states, "Tellus has found that firms may unfairly reject P2 options on financial grounds because the costs and savings are inaccurately characterized or omitted from the profitability analysis. To overcome these barriers, Tellus has developed and applied an approach known as Total Cost Assessment to assess the profitability of an investment or technology." Tellus is developing software for both lithographic and flexographic printers as well as metal finishers and printed wire board (PWB) manufacturers. A Beta version of the software package has been given to MEP centers and printers. Karen expects the packages to be ready for the printers by the Fall of this year and for PWB and metal

finishers, Fall of '97. There will also be a reference guidebook and case studies conducted with each industry involved. A nominal fee for the software and user's guide is to be determined.

Energy Environment & Manufacturing (EEM) Technology Access Project

Contact: Kenneth Saulter (ph.: 313-769-4234) of Industrial Technology Institute (ITI) in Ann Arbor, MI. The training package is now in the pilot phase and should be ready for market in September. EEM seeks to help technical assistance providers survey manufacturing processes, identify opportunities and provide prioritized operational improvements regarding energy efficiency, pollution prevention and manufacturing operations. EEM work products will include EEM assessment pilot training, an EEM protocol pocket guide, a tool kit, a users guide for the tool kit, a PC version of the protocol, a newsletter and Waste Wars - a board game. Costs will vary with the audience but may run from \$250 to \$800 per trainee.

MERIT-Metal Finishing P2 Project

Contact: John Siemak (310-263-3097) of California Mfg. Tech. Center (CMTC) in Hawthorne, CA. MERIT's purpose is to be a technology transfer tool to show technologies that are P2 effective *and* reasonable and economical for the metal finishing industry. MERIT will also demonstrate the effectiveness of the P2 processes. The tool is aimed at the Metal Finishing Association and there is no charge at present. CMTC is developing two videos - the first of which will be available in July, the other in October. There will also be fact sheets - the first is currently available, the second will be in July and the third in September. In addition, CMTC is conducting workshops. The first workshop was held last November, the second was in June and the third will be in August.

Recycling Technology Assistance Partnership (ReTAP)

Contact: David Dougherty (ph.: 206-464-7051) of the Clean Washington Center in Seattle, WA. ReTAP captures expertise on recycling issues and allows MEP agents with general knowledge to address recycling situations. A plastics film process assessment tool is available now and a recycling cost saving analysis will be ready this summer. There is a tool kit manual which includes programmatic "how to" information (with forms) and service delivery information. The programmatic material is currently in hard copy only, but ReTAP plans to have on disk next year. The service delivery material is on hard copy and diskette. ReTAP is also developing worksheet tools for the computer. This is a work-in-process effort and ReTAP needs to work with MEP centers to test the tools. If you are interested, please contact David Dougherty.

National Metal Finishing Resource Center (NMFRC)

Contact: Paul Chalmer (ph.: 313-995-4911) of the National Center for Manufacturing Sciences (NCMS). NMFRC is an on-line service for the metal finishing industry and technical assistance providers that will offer P2 and compliance assistance. The on-screen menu will include: technical information; regulations information; products and services; links to other contacts and on-line forums and conferences. The NCMS "blue book" will also be available as part of the service. There will be interactive sections. NMFRC is in the Beta testing stage now and can be accessed at <http://cai.eclipse.net/home2.htm> at no cost. There will be a charge for this service in the form of subscription fees starting in November. First year subscriptions will be \$120/subscriber. There are two other levels of subscriptions for companies rather than individuals. If you have questions regarding these, contact Paul.

Process Improvement And Pollution Prevention

By: Jeffrey Potent, Manager of Environmental and Energy Services for Industrial Technology Assistance Corporation (ITAC) (New York, NY)

Most clients who request environmental assistance from ITAC, the New York City MEP Center, have as their prime concern regulatory compliance. In many cases, however, environmental releases can be reduced through improved operating performance and efficiency. Depending on the industrial process, this approach may or may not bring the company into total compliance with environmental regulations. None-the-less, opportunities for process improvement should always be explored before considering the use of "end-of-pipe" pollution control equipment. Even if improvements made do not eliminate the need for control equipment, operating efficiencies can be improved and any required pollution control equipment may be down-sized if the operating improvements succeed in reducing air and water releases. This focus on "environmental efficiency" or pollution prevention can also result in reduced raw material use, with an associated reduction in the cost of manufacturing. In some cases, quality and timeliness may also be improved.

A good case example to support this point is a New York City electroplater who came to ITAC for assistance in improving the operating efficiency of their plating lines. The major concern was a need to better control the plating process to reduce cycle time and reject rates. The company was also concerned about environmental impacts and

regulatory compliance, but this was only one aspect of their interest in initiating a project. The result of ITAC's intervention, through the efforts of our environmental project engineer and a retired engineer who works closely with ITAC on coating and plating projects, was substantial process improvement. After a detailed process assessment was performed, an operating manual was developed and implemented. This was accompanied by worker training and several process improvements. **THE BOTTOM LINE:** Cycle time was reduced by 25%; reject and scrap rates were reduced by 10%; and, from the environment point of view, all plating lines now operate with either zero or near zero discharges.

Clearly, environmental improvement was achieved through process improvement. Had the focus only been on environmental compliance, the solution may have been to install expensive pollution control equipment, leaving the process inefficiencies in place. For more pollution prevention case studies, demonstrating process specific techniques, click on the "Hot Tips" menu screen of Tecnet, then select "Environmental."

Environmental Liability Concerns

Brian Sweeney and representatives from the law firm of Morrison and Hecker addressed legal concerns at the quarterly meeting of the environmental workgroup in St. Louis. The presentation demonstrated that effective risk management strategies can significantly reduce the risk of incurring liability.

"The idea for the presentation was to present how MEP centers can provide environmental services with the application of risk management strategies" stated Mr. Brian Sweeney of NIST MEP.

The presentation considered potential environmental services that centers can provide including: property transaction environmental assessments (Phase I Audits); compliance audits directed at ongoing facility operations; waste minimization assessments; pollution prevention assistance; environmental training; brokering of hazardous waste destined for disposal; and environmental oversight. Of these services, the most risky are hazardous waste brokering and full service environmental oversight. The least risky are for environmental education and pollution prevention. An effective risk management program will help you regardless of the environmental services that you offer.

A risk management program should include: policies and procedures for what services the centers will provide; identification of transactional and service risks; determination of what types of services will not be provided; evaluations of business operations of the center, and training and qualified staffing and a system for managing projects.

Communication of the risk management program internally is essential to get "buy-in" from employees. The center should provide training for employees in risk management and in the required technical expertise for their area of interest. Employees should understand their qualifications and protocols and should ensure they provide services they are qualified to perform.

A risk management program does not guarantee you will not incur liability, but it will reduce the chances. A key risk management strategy

includes structuring your service contracts to clearly define the scope of work and establishing the standards governing the liability. The contract should clearly state what the scope is and what the client's expectations are.

When dealing with consultants or other providers to meet clients' needs, centers should consider the potential liability of these contractors.

By defining risks and developing a set of risk management objectives which are systematically implemented, a center can create a risk management system that significantly reduces its exposure to liability. Understanding risks, developing policies and guidelines, implementing employee training and using contracts are key items in a risk management system.

Summing up the presentation, Brian Sweeney said, "You have to understand what you're getting into and have the proper qualifications for your staff. You need to have standards and procedures for doing these particular services."

A copy of the legal training materials is available from NIST. For more information contact Mr. Brian Sweeney, Manager of the MEP Environmental Program.

P2T2 Training Update

To date, training has been conducted in Massachusetts, New Mexico, Oklahoma, South Carolina, Minnesota and West Virginia. This summer the program continues with trainings scheduled for Kansas (MAMTC) and California (CMTC) in July and Virginia (AL Philpott), Delaware (DMA) and Chicago (CMC) in August. The date for training in Wisconsin has

not yet been set.

Additional programs will be presented as a result of letters of interest for the P2T2 training. Letters were received from the Hudson Valley Technology Development Center (HVTDC), the Central New York Technology Development Organization (CNYTDO), the Delaware Valley Industrial Resource Center (DVIRC), the Nebraska Industrial Competitiveness Service (NICS) and the Texas Manufacturing Assistance Center (TMAC).

See You In Seattle?

The environmental workgroup quarterly meeting will be held in Seattle on August 1 and 2. ISO 14000 will be the main topic of discussion. The meeting will take place in downtown Seattle, at the convention center and the workgroup will be staying at the Roosevelt Hotel. The Recycling Technical Assistance Partnership (ReTAP) will host the event. For more information, contact Bryan Lane (UTCIS) at 615-532-4590 or Gay Atcheson (Clean Washington Center) 206-464-6893.

MEP Environews is designed to keep you informed of the activities of the NIST MEP Environmental Workgroup. We need your input. If you have questions, comments suggestions or stories you would like to submit, please contact:

Krista Johnsen-Leuteritz
Project Manager
MEP Environmental Program
Building 301, Room C100
Gaithersburg, MD 20899-0001
Phone #: 301-975-5104

Fax #: 301-926-3787
Email: kjohnsen@mep.nist.gov

Did you know:

Four American presidents have been assassinated. Can you name them?

Answer: Abraham Lincoln (1865), James Garfield (1881), William McKinley (1901) and John Kennedy (1963).

And speaking of presidents and such, did you know that one hundred years ago this month William Jennings Bryan made his famous "cross of gold" speech at the Democratic National Convention in Chicago?

"The Great Commoner", as Bryan was known, was opposed to the idea of the United States going on the gold standard. Addressing the packed, hot hall, he concluded his thunderous denunciation of the standard with this declaration,

"You shall not press down upon the brow of labor this crown of thorns, you shall not crucify mankind on a cross of gold."

There was stunned silence as the silver-tongued orator stood on the podium, arms stretched wide, as if on a cross himself. Then all at once, from the farthest corners of the hall to the edges of the stage, the crowd exploded "like one great burst of artillery". Cheering wildly and tossing hats and coats in the air, the people rushed the speaker's stand. The next day William Jennings Bryan was nominated as the party's presidential candidate. He lost the election of 1896 to William McKinley.